UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS, Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/992,129	12/17/97	COLEMAN S	97-424

MM71/0611

MARIO J DONATO JR
CATERPILLAR INC
PATENT DEPARTMENT AB6490
100 NE ADAMS STREET
PEORIA IL 61629-6490

EXAMINER	
NGUYEN, T	
ART UNIT	PAPER NUMBER
2832	

DATE MAILED: 06/11/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

PTO-90C (Rev. 2/95)

1- File Copy

Office Action Summary

Application No.	Applicant(s)
08/992,129	Coleman et al.
Examiner	**Group Art Unit**
Tuyen T. Nguyen	2832

☐ Responsive to communication(s) filed on _____

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-10 is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-10 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-4 and 7-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2 and 7 lack of sufficient structure for performing the functional language "being molded". Claims 3, 4, and 8-10 inherit the defect in their parent claims.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Pham (US 5,339,063).

Regarding claim 1, Pham discloses a solenoid stator assembly adapted to be mounted upon a mounting seat of a fuel injector valve, comprising:

an insulative housing (40) having an upper end , a lower end, and a base adapted to fit on the mounting seat of the fuel injector valve; (figure 3)

a substantially E-shaped stator core (10) disposed within the housing, said stator core including a top portion (22) having a first end and a second end (see figure 4), a first outer pole piece (24) depending generally perpendicularly from said first end, a second outer pole piece (24) depending generally perpendicularly from said second end, and

a central pole piece (26) depending generally perpendicularly from a region of the top portion located substantially central to the first and second outer pole pieces and in a direction substantially parallel to that of the first and second outer pole pieces, the first and second outer pole pieces and the central pole piece each having a distal end (see figure 4) forming a face (see figure 4), each face being substantially flush with the base of the housing; and

a reinforcement band (9) disposed about the lower end of the housing;

said insulative housing being molded to said stator core and enveloping the stator assembly except for the faces of the first and second outer pole pieces and of the central pole piece, said insulative housing being reinforced by said reinforcement band against expanding cavity pressure developed within the assembly by fuel pressure within the fuel injector valve.

Regarding claim 2, Pham discloses the reinforcement band being molded in the housing.

Regarding claim 3, Pham further discloses the reinforcement band being retained in location by an undercut design. (See figure 4)

Regarding claim 4, Pham discloses the reinforcement band substantially annular.

5. Regarding claim 5, Pham discloses the reinforcement band extends a predetermined distance upwardly from the base of the housing.

Regarding claim 6, Pham discloses the insulative housing includes mounting portions (76) adapted to receive securing means (80) for securing said insulative housing to said fuel injector.

Regarding claim 7, Pham discloses a solenoid stator assembly adapted to be mounted upon a mounting seat of a fuel injector, comprising:

an insulative housing (40) having an upper end , a lower end, and a base adapted to fit on the mounting seat of the fuel injector valve; (figure 3)

a substantially E-shaped stator core (10) disposed within the housing, said stator core including a top portion (22) having a first end and a second end (see figure 4), a first outer pole piece (24) depending generally perpendicularly from said first end, a second outer pole piece (24) depending generally perpendicularly from said second end, and

a central pole piece (26) depending generally perpendicularly from a region of the top portion located substantially central to the first and second outer pole pieces and in a direction substantially parallel to that of the first and second outer pole pieces, the first and second outer pole pieces and the central pole piece each having a distal end (see figure 4) forming a face (see figure 4), each face being substantially flush with the base of the housing; and

a reinforcement band (9) disposed about the lower end of the housing, said reinforcement band being molded in said housing, said reinforcement band retained in location by an undercut design; (see figure 4)

said insulative housing being molded to said stator core and enveloping the stator assembly except for the faces of the first and second outer pole pieces and of the central pole piece, said insulative housing being reinforced by said reinforcement band against expanding cavity pressure developed within the assembly by fuel pressure within the fuel injector valve.

Regarding claim 8, Pham discloses the reinforcement band substantially annular.

Regarding claim 9, Pham discloses the reinforcement band extends a predetermined distance upwardly from the base of the housing.

Regarding claim 10, Pham further discloses the insulative housing includes mounting portions (76) adapted to receive securing means (80) for securing said insulative housing to said fuel injector

Double Patenting

6. Applicant has provided evidence in this file showing that the invention was owned by, or subject to an obligation of assignment to, the same entity as co-pending applications at the time this invention was made. Accordingly, co-pending applications (08/992,125; 08/992,127; 08/992,555; 08/992,556; 08/992,162; 08/992,888) are disqualified as prior art through 35 U.S.C. 102(f) or (g) in any rejection under 35 U.S.C. 103(a) in this application. However, this applied art additionally qualifies as prior art under subsection (e) of 35 U.S.C. 102 and accordingly is not disqualified as prior art under 35 U.S.C. 103(a).

Applicant may overcome the applied art either by a showing under 37 CFR 1.132 that the invention disclosed therein was derived from the invention of this application, and is therefore, not the invention "by another," or by antedating the applied art under 37 CFR 1.131.

7. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

8. Claims 1-10 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-9 of copending Application No. 08/992,888. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1-10 are provisionally rejected under the judicially created doctrine of double patenting over claims 1-9 of copending Application No. 08/922,888. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: The structure in 08/992,888 may be considered "an undercut design."

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

11. Claims 1-10 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of copending Application No. 08/992,888. Although the conflicting claims are not identical, they are not patentably distinct from each other because as a matter of design choice, the reinforcement band can be retained in location by an undercut design or by a recessed area.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Ueda (US 5,524,8250) discloses a unit type fuel injector for internal combustion engines.

- Yamaguchi et al. (US 5,370,095) discloses a fuel injection device.

- Ray (US 2,370,752) discloses an electromagnetic operated valve.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tuyen T. Nguyen whose telephone number is (703) 308-0821. The examiner can normally be reached on Monday to Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Gellner, can be reached on (703) 308-1721. The fax phone number for this Group is (703) 305-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1782.

TTN

Tuyen T. Nguyen

Patent Examiner - Group 2832

June 1, 1998

RENEE S. LUEBKE
PRIMARY EXAMINER
~~GROUP 3100~~